

Basic Forest Measurements

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If you have ever discussed forestry with a forester, most likely he or she used more measurement terms and phrases than you wanted to hear. To a forester terms like basal area, board feet, chains, cords, d.b.h., live crown ratio, and others are just part of the forestry language. Don't blame the foresters; they had all that stuff pounded into their heads for four years at some university. By the time they finish school, they think everyone talks in these terms. The trouble is the universities forgot to teach them how to communicate all this information to landowners. Sometimes foresters use these terms and phrases without even thinking the landowner doesn't understand.

Recently, I was in a Mexican restaurant and the waitress came over to take my order. She spoke with an accent and her English was not very good. My wife Karen has told me for 16 years that my English is not very good. So, the waitress and I were having a difficult time communicating, to say the least. I finally nodded in agreement to her latest statement not knowing what I was going to get to eat.

Oftentimes landowners feel the same way when they are discussing forestry. They end up nodding in agreement with the forester or timber buyer unsure of what they are going to get out of the deal. There is one big difference between the two situations. My lunch only cost \$6. If it isn't good, I can get over it with the help of a couple of Roloids. A landowner may have to live with his or her misunderstanding for years.

Nothing can replace a well written contract when selling timber; however, it is always wise to be well versed in some basic terms. Being familiar with these terms is good even if you are not going to sell any timber. This article seeks to highlight some of the basic forestry terms and phrases that may or may not be familiar to you.

Staying informed, being familiar with the terms, and knowing your product is important when making decisions that

will impact your timber. Contact your local Alabama Forestry Commission office if you would like more information on managing your timber. The Alabama

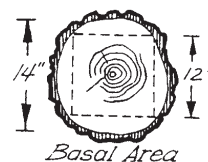
Forestry Commission offers practical, scientific advice and forest management assistance. But, you are on your own when you go to eat Mexican.



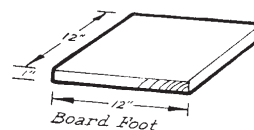
FOREST MEASUREMENT TERMS

Acre: A unit of area equaling 43,560 square feet or 10 square chains.

Basal Area: The area, usually in square feet, of the cross-section of a tree stem near its base, generally at breast height and inclusive of bark. The basal area per acre measurement gives you some idea of crowding of trees in a stand.

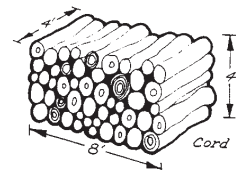


Board Foot: A unit of area for measuring lumber equaling 12 inches by 12 inches by 1 inch.



Chain: A unit of length. A surveyor's chain equals 66 feet or 1/80-mile, while the engineer's chain equals 100 feet.

Cord: A pile of stacked wood measuring 4 feet by 4 feet by 8 feet when originally conceived. Today the cord measure is largely based on weight. In Alabama the average cord of pine wood weighs 5,350 pounds and ranges between 4,700-5,550 pounds depending on the species and the region of the state.



Cubic Foot: A unit of volume measure, wood equivalent to a solid cube that measures 12 inches by 12 inches by 12 inches or 1,728 cubic inches.

Cunit: A volume of wood measuring 3 feet and 1-1/2 inches by 4 feet by 8 feet and containing 100 solid cubic feet of wood.

D.B.H. (diameter breast height): The measurement of a tree's diameter at 4-1/2 feet above the ground line.



Measuring DBH

Face Cord: A stack of wood measuring 2 feet by 4 feet by 8 feet. This unit of measure was primarily for firewood.

Live Crown Ratio (LCR): The percentage of the total tree height that has live, healthy crown.

M.B.F. (thousand board feet): A unit of measure containing 1,000 board feet.

Saw Log: A log considered suitable in size and quality for producing sawn timber.

Sawtimber: Trees fit to yield saw logs.

Section: A unit of area containing 640 acres or one square mile.

Site Class: A measure of the relative productive capacity of a site.

Site Index: A measure of the productivity of a site as indicated by the height of the dominant trees in the stand at an arbitrarily chosen age (usually 25 or 50).

Square Foot: A unit of area equaling 144 square inches.

Township: A unit of land area covering 23,040 acres or 36 sections.